

RFCA Stakeholder Focus Group

June 6, 2001

Meeting Minutes

INTRODUCTION AND ADMINISTRATIVE

A participants list for the June 6, 2001 Rocky Flats Cleanup Agreement (RFCA) Stakeholder Focus Group meeting is included in this report as Appendix A.

Reed Hodgins of AlphaTRAC, Inc., meeting facilitator, reviewed the purpose and meeting rules. Introductions were made.

Reed asked if there were any questions or comments regarding the May 9, 2001 meeting minutes, noting that the Focus Group would again be asked after the break, as the meeting minutes were just out that day.

Reed reviewed the meeting agenda, which included:

- RSAL Working Group Update
- Task 1 Peer Review Discussion
- RSALs Task 2, Model Evaluation Discussion
 - RFCA parties' responses to peer review comments
 - EPA RAGs modeling overview
 - Focus Group Summary of Task 2 Issues
- End State Presentation and Discussion: Surface Water
- RFCA Parties Feedback - What Heard, How Used, Decisions / Choices Made
- Set Future Agendas and Review Meeting

RSAL WORKING GROUP UPDATE

Reed noted that the objective for this discussion was to:

- Keep up to date on working group progress

Steve Gunderson of the Colorado Department of Public Health and Environment (CDPHE) briefed the Focus Group on the status of the Radiological Soil Action Levels (RSALs) Working Group.

Steve stated that the RSAL Working Group had been finalizing parameter selection and calculations in preparation for risk and dose calculations. Recent efforts had focused on:

- Plant ingestion, especially differentiation between leafy and non-leafy vegetables,
- Mass loading distribution, especially the shape of the distribution curve above the 80th percentile, and
- Soil ingestion, and incorporation of results from the Anaconda, Montana Superfund studies.

Steve indicated that risk and dose calculations were imminent and that the RSAL Working Group might have results for presentation at the RFCA Focus Group meeting on July 11, 2001.

The Focus Group discussed the basis for the soil ingestion input parameter at some length. Some members questioned if multiple studies had been examined before settling on the Anaconda study as a basis for the input distribution. Others were concerned with the sample size of the Anaconda study might be too small. Others were concerned that the soil ingestion rate developed might be lower (thereby resulting in lower doses and risks) than that calculated by RAC in its earlier analysis.

Reed summarized the discussion by communicating to the agencies that it will be very important to justify that soil ingestion number used in the RSAL calculations - why those data are most appropriate to use and why the sample size is appropriate for this purpose. It will also be important to demonstrate clearly the degree to which the results are "conservative" - tending to overestimate health impacts as a compensation for uncertainties.

RSALS TASK 2, RAGS MODEL OVERVIEW

Reed noted the objectives for the Risk Assessment Guidance for Superfund (RAGS) model overview:

- Get overview understanding of RAGS
- Understand RAGS role in RSAL process

Susan Griffin of the U. S. Environmental Protection Agency (EPA) provided an overview briefing on EPA's RAGS risk assessment model and its application to the Rocky Flats Radioactive Soil Action Level (RSAL) setting process. A copy of Susan's presentation is included as Appendix B.

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Susan discussed the risk assessment approach that EPA uses at all CERCLA sites. She described the use of site conceptual models and showed examples from the RSAL project.

Susan then explained the theory and equations that make up the RAGS risk modeling approach. She referred to the documentation that had been included in the meeting packet.

She showed how risk is calculated using a reasonably maximum exposure analysis using RAGS. She indicated that the highest exposure that is reasonable to expect is calculated for every scenario. She stated that site-specific input values are used where possible, with EPA-specified national values used when local data are not available.

Susan also compared the RAGS approach to the probabilistic method used in the RESRAD model. Susan discussed risk vs. dose modeling and their applications to this project.

Susan then held a discussion with the Focus Group.

Members of the Focus Group moved the discussion back to the Anaconda ingestion study with a concern again raised about the size of the sample in the study. Susan responded by stating the importance of examining study design and noted other studies that had corroborated the Anaconda tests.

Members asked about the approach used in RESRAD for probabilistic calculations. Susan explained that thousands of individual calculations are performed, each with different values from the distributions that describe the different input parameters. Then the thousands of individual results are grouped and examined statistically.

RSALS TASK 2, MODEL EVALUATION DISCUSSION

Reed noted the objectives for the RSALs Task 2, Model Evaluation discussion:

- Get agency response to peer review comments
- Discuss task 2 report and peer review
- Reach closure for focus group

Russell McAllister of the U. S. Department of Energy (DOE) presented the agencies' response to the Peer Review comments. He distributed a written response to the Focus

Group at the meeting (Appendix C). He also distributed a written response to comments received from LeRoy Moore and Victor Holm (see the June 20, 2001 packet).

Russell noted that the peer reviewers had come to very different conclusions in their reviews of the Task 2 report. He stated that Reviewer 1 found that the approach was sound and justified by the analysis. He indicated that a number of small issues and editorial comments raised by this reviewer would be addressed in the revision to the Task 2 report.

Russell noted that Reviewer 2 was much more critical of the report. He believed that the reviewer found the overall approach to be sound and appropriate, with the exception of two major deficiencies:

- CERCLA regulatory requirements are not addressed in the Task 2 report, and
- The requirement that the model be in the public domain is overly restrictive.

Russell stated that the first issue was addressed in the Task 1 report, and thus not repeated in the Task 2 report. He noted that the bottom line of the regulatory requirements for modeling is that both Nuclear Regulatory Commission and EPA requirements must be met, resulting in modeling for both dose and risk.

Russell indicated that the public domain requirement had been established to ensure that a thorough scrutiny of the modeling methodology could be made by the agencies and members of the community.

Russell also noted that the reviewers had asked for more background information about approaches and methodologies. He stated that more information would be included in the next revision of the report, including an executive summary, the choice and application of the probabilistic approach, and the conceptual site model.

Reed asked that members of the Focus Group submit specific comments on the response documents after they had a chance to read the document. He then turned the meeting over to the Focus Group for an initial discussion.

The group first discussed the RAC application of RESRAD and its role in the Task 2 review. It was noted that the agencies believe that most of the issues around the RAC application of RESRAD were really related to choice of parameters rather than modeling methodology. Russell noted that a comparison of RAC's RESRAD to RESRAD 6.0 for air resuspension showed similar results.

A member of the Focus Group noted that the recent modeling workshop was very helpful on this issue. He suggested that some of the materials and findings be included in the revised Task 2 report.

It was clarified during the discussion that risk would be calculated using both RESRAD 6.0 and RAGS. It was requested that the agencies' overall approach to evaluating risk, including how RESRAD and RAGS would both be used, be included in the Task 2 report.

It was noted that the Task 2 report should specifically state how the evaluation criteria established in the review are necessary and sufficient to meet the objectives of the model review.

The discussion returned to parameters for a few minutes. Some concern was voiced about the use of mean values (rather than extreme values) for RESRAD input parameters that were being assigned point values rather than distributions. Russell responded that point values were being used only for those parameters that had minimal affect on model results, so it would not matter whether a mean or extreme was used. It appeared from the discussion that further explanation of the use of distributions and point estimates would be beneficial - either in the Task 2 or Task 3 report.

The agencies requested that the Focus Group answer two questions when reviewing agency responses to the peer reviews:

- Did the response document adequately address the issues raised by the peer reviewers, and
- Are there any remaining major unresolved issues in Task 2?

Reed discussed the path forward with the Focus Group. The group agreed that they could not close their discussion of Task 2 until they had read and commented on the agencies' response documents.

TASK 1 PEER REVIEW DISCUSSION

Reed introduced this agenda item as a continuation of a discussion that had begun at the last Focus Group meeting. He noted the objectives for the Task 1, Peer Review discussion:

- Obtain issues from the Focus Group regarding the Task 1 peer review and response;

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- Communicate these issues to the agencies; and
- Get responses from the agencies.

Reed turned the floor over to the Focus Group to raise and address their issues.

The discussion focused on the choice of the anticipated land use scenario. Some members of the Focus Group asked why the wildlife refuge worker had been chosen as the anticipated land user instead of the more conservative resident rancher scenario. These members felt that a more conservative scenario would be more protective of any possible future use at Rocky Flats. It was asked if the decision to use the wildlife refuge worker scenario was final.

EPA responded that the scenario was not absolutely set because the final decision rested with the agency Principals. However, all three agency Project Coordinators (EPA, CDPHE, and DOE) stated clearly that, based on the information so far on the table, they would recommend to their Principals that the wildlife refuge worker scenario be considered the anticipated land user.

CDPHE reminded the group that all of the planned scenarios would be evaluated and the results of all considered in the analysis.

The agencies provided a perspective on the requirements and guidance (especially associated with CERCLA) and how they set bounds on the assessment and the choices that could be made. EPA noted that the law does not require a dependence on anticipated future use, but stated that this approach is strong EPA policy.

DOE noted that the current analysis is constrained in practice by the laws and guidance and compared this to the 1996 RAC analysis, which was deliberately NOT constrained in this way.

A member of the Focus Group noted that the law did not prohibit the agencies from being more protective than the minimum required and suggested that the resident rancher or another scenario more cautious than the wildlife refuge worker could be recommended by the agencies.

The agencies responded that they had evaluated the different scenarios and considered the wildlife refuge worker to be an appropriately conservative scenario to represent anticipated future land use.

Another member of the Focus Group noted that the choice of an anticipated land use scenario for Rocky Flats is being viewed as potentially policy setting across the DOE

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Complex. He noted that the choice will thus be evaluated against national needs as well as local needs. He suggested that the community should expect the precedent-setting aspect of this decision to affect the degree of conservatism that DOE and Congress would support at Rocky Flats.

A member of the Focus Group confirmed that the law allows the adoption of a more conservative scenario and that he would continue to oppose any anticipated land use scenario that was less conservative than the resident rancher scenario.

Another member of the Focus Group pointed out that, while the law allows a more conservative approach, the most conservative approach is not required. The law also allows the approach being used.

CDPHE explained that the agency's charge from its Principal was to work within the laws and guidance. The legal staff at the agency had thoroughly evaluated the intent of the law and guidance and had determined that the approach currently being used was most consistent with the intent and application of the laws and guidance.

A member of the Focus Group expressed confusion on how ALARA was going to be conducted as part of the regulatory framework. CDPHE responded that the approach to ALARA would be precedent setting, was yet to be developed, and would be a major policy topic for both the agencies and the Focus Group.

A member of the Focus Group stated that one of the most important policy discussions with the community was to determine where cleanup should go beyond that required by law for reasons that make sense to everyone. EPA noted that the 903 pad cleanup could be a specific example - where surface water protection produced a cleanup beyond the CERCLA requirements.

DOE stated that the challenge to the agencies and the community is to determine the smartest way to spend the cleanup up funding at Rocky Flats.

END STATE PRESENTATION AND DISCUSSION: SURFACE WATER

Reed indicated that the objective for the surface water end state presentation was:

- Provide an overview of the issues and options associated with surface water end state at Rocky Flats.

John Rampe of DOE presented the overview (see the June 6, 2001 packet).

John discussed four components of the surface water picture at Rocky Flats:

1. Basic studies,
2. Environmental restoration,
- ✓3. Land reconfiguration, and
4. Water management.

He then addressed policy / technical questions that were being considered as the discussion gets underway:

- Are there specific areas where removing contamination will significantly improve water quality and/or lessen DOE's stewardship obligations?
- Is stabilization "as good as" removal when it comes to long term surface water quality protection?
- Given that Site water quality is already reasonably good, to what extent should water quality protection be a goal of environmental restoration projects? Where is it appropriate?
- Regarding passive treatment systems, have they been designed to be commensurate with the expected lifetime of the contaminant? Is additional subsurface source removal warranted?

The Focus Group then discussed the surface water end state picture. The discussion was limited by available time.

A technical discussion centered on the effects of colloidal suspension and states of plutonium on transport in surface water. Both the actinide migration study at Rocky Flats and a study at Yucca Mountain were discussed.

Another topic discussed was compliance obligations. This discussion centered on the surface water standard. DOE was asked if it was proposing a change to the water standard. DOE responded that it had not proposed a change to the Water Quality Control Commission, though there was a potential that this discussion could occur. The focus right now is more on where and how water quality will be measured for comparison to the standard. There is also a focus on the design of a water quality monitoring system that will be effective into the Stewardship period.

A member of the Focus Group asked if the Fish and Wildlife Service would be involved in developing the monitoring plan. DOE responded that the Service would be involved.

The discussion was closed due to time constraints.

NEXT MEETING AGENDA

Members of the Focus Group expressed concern that there was insufficient time on the agendas to properly discuss the topics presented. It was noted that this was especially true for the end state discussion; that Surface Water Management needed much more time for dialog than had been available.

Reed agreed to address this problem with the Agenda Group.

The meeting was adjourned at 6:35 p.m.

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**Appendix A
Participants List**

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**Appendix B
Susan Griffin, U. S. Environmental Protection Agency:**

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**Appendix C
Russell McCallister, U. S. Department of Energy:**